# **CURRICULUM VITAE**

### SIMEON AGATHOPOULOS

Diploma of Chemistry, Ph.D. of Chemical Engineering Professor of "Ceramics Technology" in the Dept. of Materials Science and Engineering of the University of Ioannina, Greece

Born	: 31 January 1966, Athens, Greece
Citizenship	: Greek
Current Address	<ul> <li>Department of Materials Science and Engineering School of Engineering University of Ioannina GR – 451 10 IOANNINA, GREECE</li> </ul>
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# **Education, Research and Professional Experience:**

1971-1983	: Basic studies, Athens, Greece.
1983-1988	: Dept. of Chemistry, University of Patras, Greece.
1989-1994	: Doctoral Thesis in Chemical Engineering Dept., University of Patras. Lab. of Physical Metallurgy, Greece
1994-1996	: Post-Doctoral in Joint Research Centre, Institute for Advanced Materials, Petten, The Netherlands.
1999-2005	: Post-Doctoral Researcher in Dept. of Ceramic and Glass Engineering, University of Aveiro, Portugal.
2005-2006	: Assistant Professor (temporary), Dept. of Materials Science and Technology University of Ioannina, Greece.
2006-2008	: Excellent Scientist invited by the Dept. of Materials Science and Technology University of Ioannina, Greece for the European Project ENTER.
2009-2013	: Assistant Professor of "Ceramics Technology" Dept. of Materials Science and Engineering, University of Ioannina, Greece.
2013-2018	: Associate Professor of "Ceramics Technology"
2018-	: Professor of "Ceramics Technology"
	Dept. of Materials Science and Engineering, University of Ioannina, Greece.

Military service:

1997-1998 : Greek Navy Force

### **Fellowships:**

: Post graduate researcher of Institute of Chemical Engineering and High Temperature Chemical Processes, (ICE/HT), Patras.
: Post-Doctoral Researcher of Human Capital and Mobility, J.R.C., Inst. for Advanced Materials (IAM), Petten, The Netherlands.
: Post-Doctoral Researcher of University of Aveiro, Portugal.
: Post-Doctoral Researcher of the Portuguese Foundation of Science and Technology ("FCT"), Portugal.
: Project of Introducing Ph.D. Researchers from Abroad in the Greek R & D System (ENTER), Greek General Secretariat of Research and Technology, and European Union.

### **Honours:**

- 1996 : Excellent Scientist (by the Greek Ministry of National Defence).
- 2005 : Chair of the Session "Synthesis and Manufacturing" of the Symposium "S11-Bioceramics: Materials and Applications" of the 107th Annual Meeting & Exposition of the American Ceramic Society, Baltimore, MD, USA, April 10-13, 2005.
- 2006: Member of the International Advisory Committee of the Fifth China International Conference on High-Performance Ceramics, Changsha, China, May 10-13, 2007.
- 2007: Chair of Wetting Session of the 5<sup>th</sup> High Temperature Capillarity (HTC-2007) Congress, Alicante Spain, March 21-24, 2007.
- 2009: Organization (with Prof. P. Nikolopoulos) of the 6<sup>th</sup> International High Temperature Capillarity (HTC-2009) Conference, Athens, Greece, May 6-9, 2009.
- 2009: Member of the Local Organizing Committee of the Workshop of the Greek Metallurgy Association and the Greek Ceramic Association, Metal-Ceramics for Advanced Technologies, Ioannina, April 3, 2009.
- 2009: Member of the Scientific Board of the First International Ceramic, Glass, Enamel, Glaze and Pigment Congress, SERES 09, Anadolu University, Yunusemre Campus, Congress Centre, Eskisehir, October 12-14, 2009.
- 2010: Chairman of the 4<sup>th</sup> Greek Conference of the Hellenic Society of Biomechanics, HSB (ELEMBIO), Ioannina, 4-6 June, 2010.
- 2010: Chairing of the Session "Electroceramics", Workshop of the Greek Scientific Society of Ceramics, University of Ioannina, 29 September, 2010.
- 2011: Member of the Organizing and Scientific Committee of the 10<sup>th</sup> International Workshop on Biomedical Engineering, Kos, 5-7 October 2011.
- 2011: Member of the International Advisory Committee of the Seventh China International Conference on High-Performance Ceramics, Xiamen, China, November 4-7, 2011.
- 2012: Member (Secretary) of the International Scientific Committee of "High Temperature Capillarity" (HTC).
- 2012: President of the Greek (Hellenic) Society of Biomechanics (EAEMBIO), 2013-2014.
- 2015: President of the International Scientific Committee of "High Temperature Capillarity" (HTC).

- 2016: Member of the Scientific and Organizing Committee of the 6<sup>th</sup> Greek Conference of Matellic Materials, Ioannina, 7-9 December, 2016.
- 2017: Vice President of the Greek Society of Ceramic Materials (EKE).

## **Conferences' organization:**

- Organization (with Prof. P. Nikolopoulos) of the 6<sup>th</sup> International High Temperature Capillarity (HTC-2009) Conference, Athens, Greece, May 6-9, 2009.
- Organization of the 4<sup>th</sup> Greek Conference of the Hellenic Society of Biomechanics, HSB (ELEMBIO), Ioannina, 4-6 June, 2010.

### **Research Interests:**

His research is in the area of ceramics, glasses, glass-ceramics and composites for biomedical, functional and structural applications. Specifically:

- 1. Advanced and traditional ceramics (preparation methods, mechanical and thermal properties, surface characterization).
- 2. Bioceramics, biomaterials and tissue engineering scaffolds (development and synthesis of ceramics applied in biomedicine, biocompatibility).
- 3. Interfaces of ceramics with biological liquids or liquid metals at high temperatures, (wettability, work of adhesion, interfacial energy), and ceramic-metal composites (joining techniques, brazing).

### Member of Scientific Societies:

- 1. The Greek Chemistry Society
- 2. The Hellenic Ceramic Society The European Ceramic Society
- 3. The American Ceramic Society, (Engineering Ceramics Division).
- 4. European Society for Biomaterials
- 5. International Society for Ceramics in Medicine (ISCM).
- 6. Hellenic Society of Biomechanics (member of the Assembly, 2010- ), (which is associated member of the International Society of Biomechanics)
- 7. Hellenic Society of Biomaterials (which is associated member of the European Society of Biomaterials).
- 8. Hellenic Society of Metal Materials (which is associated member of FEMS).
- 9. Marie Curie Fellowship Association The Greek and Portuguese branches of M.C.F.A.
- 10. National Institute of Ceramic Engineers (NICE) of USA.
- 11. International Scientific Society of the "High Temperature Capillarity" (HTC).

# **Participation in European and National Research Projects:**

- 1. EUREKA (EU-294): Biomaterials, medical materials (main researcher).
- 2. SCIENCE (SCI-0384-C): The influence of oxygen on the interfaces formed between metals and oxide ceramics.
- 3. JOULE (JOU2-CT92-0063): New SOFC materials and technology.
- 4. HUMAN CAPITAL AND MOBILITY (No 950153): The kinetics of active metal braze spreading of ceramics (main researcher).
- 5. PORTUGUESE FOUNDATION OF SCIENCE & TECHNOLOGY (SFRH/1619/2000):
  - (a) Determination of Interfacial Interactions between Ceramic Oxides and Other Phases, with relevance to Biomedical Applications.
  - (b) Fabrication of short mullite fibres from kaolin to reinforce CMC bioceramic materials.
  - (c) Production and characterization of novel materials which involve ceramics and glasses for advanced applications with relevance to biomedicine and environmentally friendly aims.
- 6. UNIVERSITY OF AVEIRO:
  - (a) Biosensors made of zirconia and Ti-alloys.
  - (b) Composite scaffolds for bone tissue engineering (Institute for Investigation, I & DT Projects for Health Science and Technology 2002, budget 99.900 €, duration: 36 months).
- 7. PYTHAGORAS (II YP.14):

Development of bioactive and bio-mimetic inorganic materials via sol-gel method and surface bio-activation of glasses and glass-ceramics. (Financially supported by the Greek Minister of Education; duration: 9 months).

8. ENTER (04EP26):

Development of new ceramic and glass materials for dental applications (main researcher). (Carried out in the Department of Materials Science and Technology, University of Ioannina, Greece; Financially supported by the Greek General Secretariat of Research and Technology and the European Union; budget  $78.000 \in$ ; duration: 24 months).

- 9. RESEARCH COMMITTEE OF THE UNIVERSITY OF IOANNINA (Code 80000): Hydrogen storage materials for solar energy applications. 01/11/07-28/02/08. Sponsored by Innova Technolgy Solutions SRL.
- 10. THALIS (Code 668 or NTUA202):

Development of ceramic-matrix composite nano-materials with metallic inclusions – investigation of mechanical and phycochemical properties with experimental, theoretical and calculation methods (NAMCO). Coordination by the National Technical University of Athens; coordinator of the research group of the University of Ioannina (2011-2013, budget 521.739 Euros).

11. RESEARCH COMMITTEE OF THE UNIVERSITY OF IOANNINA (Code 80783): Writing of textbook on glass-ceramic materials. (budget 2.500 Euros – donation of the Metallurgical Company of Greece, LARCO).

### Member of the Editorial Board of Journals:

- Co-Editor (with Assoc. Prof. Dr. Theofilos Colettis, Medical School, Univ. Ioannina) in the Special Issue of *Current Pharmaceutical Design (Impact Factor* 4.774) entitled "*Novel strategies for cardiac repair post-myocardial infarction*" (it will appear in 2013).
- Editorial Board of the Conference Papers in Materials Science (<u>http://www.cpis.com/journals/ms/editors/</u>).
- Editorial Board of the Open Crystallography Journal (ISSN 1874-8465) (until 2010).
- Co-Editor (with Ecaterina Andronescu, Jared M. Brown, Faik Oktar, Joshua Chou, Akiko Obata), in the Special Issue of the *Journal of Nanomaterials* (Volume 2016), entitled "*Nanomaterials for Medical Applications: Benefits and Risks*" (Editoral Article ID 8284319, 2 pages).
- Member of the Scientific Committee of the journal Transactions of Foundry Research Institute.

### Journals reviewer:

- 1. Biomaterials (IF 7.882)
- 2. Journal of Biomedical Materials Research A&B (IF 5.264)
- 3. Journal of Materials Chemistry (IF 5.099)
- 4. Acta Biomaterialia (IF 4.822)
- 5. Journal of the European Ceramic Society (IF 2.574)
- 6. Biomedical Materials (IF 2.467)
- 7. Materials Chemistry and Physics (IF 2.353)
- 8. Journal of Solid State Chemistry (IF 2.261)
- 9. Journal of Biomaterials Applications (IF 2.246)
- 10. Journal of the American Ceramic Society (IF 2.167)
- 11. Materials Research Bulletin (IF 2.145)
- 12. Journal of Alloys and Compounds (IF 2.134)
- 13. Materials Letters (IF 2.117)
- 14. Journal of Physics D-Applied Physics (IF 2.105)
- 15. Bioprocess and Biosystems Engineering (2.060)
- 16. Surface Science (IF 2.010)
- 17. Electrochemical and Solid-State Letters (IF 1.967)
- 18. Journal of Materials Science (IF 1.855)
- 19. Interface Science (it is now part of the J.Mater.Sci., IF 1.855)
- 20. Solid State Sciences (IF 1.828)
- 21. Journal of Luminescence (IF 1.795)
- 22. Microscopy Research and Technique (IF 1.712)
- 23. Journal of Thermal Analysis and Calorimetry (IF 1.600)

- 24. Journal of Materials Processing Technology (IF 1.567)
- 25. Journal of Non-Crystalline Solids (IF 1.483)
- 26. Journal of Materials Research (IF 1.395)
- 27. Journal of Physics and Chemistry of Solids (IF 1.381)
- 28. International Journal of Photoenergy (IF 1.345)
- 29. Materials Science and Engineering B (IF 1.100)
- 30. Vacuum (IF IF 1.048)
- 31. Metallurgical and Materials Transactions B (IF 0.963)
- 32. Journal of Materials Science: Materials in Electronics (IF 0.927)
- 33. Journal of Materials Engineering and Performance (IF 0.639)
- 34. Physics and Chemistry of Glasses (IF 0.500)
- 35. Ceramics Transactions (IF 0.000)
- 36 Materials Science Forum (IF 0.000)
- 37. Biomaterials Science (it will first apper in 2013)

### Administration duties in the Univesity of Ioannina

- 1. Vice-President of the Department, Member of the Senate of the University
- 2. Member of the Assurance of Quality in the University.
- 3. Scientific coordinator of ERASMUS in the department.
- 4. Coordinator of the webpage of the department.
- 5. Coordinator of the "Fellowship Dimitrios Karasoulis".
- 6. Coordination of Master courses.
- 7. Member of the Internal Evauation Committee of the Department.

### Writing Notes and Books:

- "Thermal analysis of metals and alloys". (in Greek) S.Agathopoulos, G.N.Angelopoulos. New Laboratory Exercise (for students) in Materials Lab, 39 pages. Supplement of 8 pages about essay of experiment presentation.
- "Preparation of ceramic powders with Sol-Gel method" (in Greek) S.Agathopoulos Notes of university students, pages 14.
- "Programming and Control: The case of high temperature furnaces" (in Greek) S.Agathopoulos Notes of university students, pages 14.
- 4. "Biomaterials". (in Greek)S.Agathopoulos.Notes (for students), pages 300.
- "100 Experiments of Chemistry". (in Greek) S.Agathopoulos. Pages 104.
- 6. "Brazing wettability interfacial diffusion". (in Greek)
  S.Agathopoulos
  Notes for university students (pages 54).
- "Ancient Greek Ceramics". (in English and in Portuguese) S.Agathopoulos Notes for university students (pages 47).
- Laboratory exercises on Biomaterials S.Agathopoulos. Notes of university students (under writing).
- Glass-Ceramics S.Agathopoulos. Notes of university students (under writing).
- Shaping techniques of ceramics, sintering and mechanical properties S.Agathopoulos. New Laboratory Exercise (for students) in Materials Lab, 30 pages. Supplement of 21 pages about essay of experiment presentation.
- Technology of Ceramics and Glasses.
   S.Agathopoulos.
   Special volume that gathers 4-page essays of students (pages 131).

### Assistance in Book Editions (in greek):

- 1. D.C.Papamantellos, "Special Subjects of Metallurgy", Patras 1990.
- 2. "Guide of Studies in Chemical Engineering Department of University of Patras", 1992-1993.
- 3. G.H.Sarantoglou, "Mechanical, Electrical and Electronic Designs", Patras 1994.

# **Teaching:**

- A. Chemical Engineering Dept. Univ.Patras, Greece (1989-1994):
- 1. Introduction to Materials Science (4 semesters).
- 2. Ceramics and Inorganic Binding Materials (3 semesters).
- 3. Materials Science and Technology (1 semester).
- 4. Laboratory of Physical Chemistry and Materials (7 semesters)
- 5. Laboratory of Metallurgy and Materials (1 semester).
- 6. Diploma Theses of 24 students.
- B. Ceramic and Glass Engineering Department, Univ. Aveiro, Portugal (2000-2005):
- 1. Materials Joining (1 semester).
- 2. Advanced ceramics (1 semester).
- 3. Interfacial interactions between bioceramics and body substances (lecture to post-graduate courses, M.Sc. & Ph.D., in Biomedical Engineering Univ.Porto).
- 4. Diploma Thesis of 1 student.
- 5. Master Thesis of 1 student.
- C. Materials Science and Engineering Dept., Univ. Ioannina, Greece (2006-):
- 1. Laboratories of General Chemistry
- 2. Materials Characterization Methods and Techniques
- 3. Ceramics
- 4. Technology of Ceramics and Glasses
- 5. Advanced Ceramics
- 6. Bioceramics
- 7. Biomaterials
- 8. Laboratory of Materials I "Introduction to Materials"
- 9. Laboratory of Materials II "Ceramics and Composites"
- 10. Master Courses
- *Diploma Theses:* Supervision 33 students, Jury 87 students.
- <u>Master Theses:</u> Supervision 12 students (7 accomplished), Jury of 10 students.
- <u>*Ph.D. Theses:*</u> Supervision 3 students (all accomplished), Member of the supervising committee 3 student (2 accomplished), Jury of 16 students.

**Reserach records:** 

•	<b>Publications in International Refereed Journals</b>	:	225
	Citations	: 3.500	
	h-index	:	33
	(Data were obtained from SCOPUS)		
•	<b>Other Referred Publications - Reports – Thesis</b>	:	19
•	Publications in Conferences and Lectures	:	260
•	Other Referred Publications - Reports – Thesis Publications in Conferences and Lectures	:	2

Invited lectures : 15